UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/598,048	09/20/2007	Robert R. Rando	HMV-091.02	9518

58475 7590 01/15/2009

FOLEY HOAG, LLP
PATENT GROUP (w/HUV HMV)
155 SEAPORT BLVD.
BOSTON, MA 02210-2600

EXAMINER	
SZNAIDMAN, MARCOS L	
ART UNIT	PAPER NUMBER
1612	
MAIL DATE	DELIVERY MODE
01/15/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/598,048	RANDO, ROBERT R.	
	Examiner	Art Unit	
	MARCOS SZNAIDMAN	1612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *1* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 September 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-264* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-264* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-50, drawn to a method of treating or preventing an ophtalmological disorder in a subject, the method comprising: administering to the subject a drug that inhibits. Antagonizes, or short circuits the visual cycle that occurs outside a disc of a rod photoreceptor cell, wherein the drug has the structure of formula Ia or Ie.

Group II, claim(s) 1-50, drawn to a method of treating or preventing an ophtalmological disorder in a subject, the method comprising: administering to the subject a drug that inhibits. Antagonizes, or short circuits the visual cycle that occurs outside a disc of a rod photoreceptor cell, wherein the drug has the structure of formula Ib or If.

Group III, claim(s) 1-50, drawn to a method of treating or preventing an ophtalmological disorder in a subject, the method comprising: administering to the subject a drug that inhibits. Antagonizes, or short circuits the visual cycle that occurs outside a disc of a rod photoreceptor cell, wherein the drug has the structure of formula Ic or Ig.

Group IV, claim(s) 1-50, drawn to a method of treating or preventing an ophtalmological disorder in a subject, the method comprising: administering to the subject a drug that inhibits. Antagonizes, or short circuits the visual cycle that occurs outside a disc of a rod photoreceptor cell, wherein the drug has the structure of formula Id or Ih.

Group V, claim(s) 1-50, drawn to a method of treating or preventing an ophtalmological disorder in a subject, the method comprising: administering to the subject a drug that inhibits. Antagonizes, or short circuits the visual cycle that occurs outside a disc of a rod photoreceptor cell, wherein the drug has the structure of formula IIa or IIe.

Group VI, claim(s) 1-50, drawn to a method of treating or preventing an ophtalmological disorder in a subject, the method comprising: administering to the subject a drug that inhibits. Antagonizes, or short circuits the visual cycle that occurs outside a disc of a rod photoreceptor cell, wherein the drug has the structure of formula IIb or IIf.

GroupVII, claim(s) 1-50, drawn to a method of treating or preventing an ophtalmological disorder in a subject, the method comprising: administering to the subject a drug that inhibits. Antagonizes, or short circuits the visual cycle that occurs outside a disc of a rod photoreceptor cell, wherein the drug has the structure of formula IIc or IIg.

Group VIII, claim(s) 1-50, drawn to a method of treating or preventing an ophtalmological disorder in a subject, the method comprising: administering to the subject a drug that inhibits. Antagonizes, or short circuits the visual cycle that occurs outside a disc of a rod photoreceptor cell, wherein the drug has the structure of formula IId or IIh.

Group IX, claim(s) 1-50, drawn to a method of treating or preventing an ophtalmological disorder in a subject, the method comprising: administering to the subject a drug that inhibits. Antagonizes, or short circuits the visual cycle that occurs outside a disc of a rod photoreceptor cell, wherein the drug has the structure of formula IIIa or IIIe.

Group X, claim(s) 1-50, drawn to a method of treating or preventing an ophtalmological disorder in a subject, the method comprising: administering to the subject a drug that inhibits. Antagonizes, or short circuits the visual cycle that

occurs outside a disc of a rod photoreceptor cell, wherein the drug has the structure of formula IIIb or IIIf.

Group XI, claim(s) 1-50, drawn to a method of treating or preventing an ophtalmological disorder in a subject, the method comprising: administering to the subject a drug that inhibits. Antagonizes, or short circuits the visual cycle that occurs outside a disc of a rod photoreceptor cell, wherein the drug has the structure of formula IIIc or IIIg.

Group XII, claim(s) 1-50, drawn to a method of treating or preventing an ophtalmological disorder in a subject, the method comprising: administering to the subject a drug that inhibits. Antagonizes, or short circuits the visual cycle that occurs outside a disc of a rod photoreceptor cell, wherein the drug has the structure of formula IIId or IIIh.

Group XIII, claim(s) 1-50, drawn to a method of treating or preventing an ophtalmological disorder in a subject, the method comprising: administering to the subject a drug that inhibits. Antagonizes, or short circuits the visual cycle that occurs outside a disc of a rod photoreceptor cell, wherein the drug has the structure of formula IV.

Group XIV, claim(s) 1-50, drawn to a method of treating or preventing an ophtalmological disorder in a subject, the method comprising: administering to

the subject a drug that inhibits. Antagonizes, or short circuits the visual cycle that occurs outside a disc of a rod photoreceptor cell, wherein the drug has the structure of formula V.

Group XV, claim(s) 1-50, drawn to a method of treating or preventing an ophtalmological disorder in a subject, the method comprising: administering to the subject a drug that inhibits. Antagonizes, or short circuits the visual cycle that occurs outside a disc of a rod photoreceptor cell, wherein the drug has the structure of formula VIa.

Group XVI, claim(s) 1-50, drawn to a method of treating or preventing an ophtalmological disorder in a subject, the method comprising: administering to the subject a drug that inhibits. Antagonizes, or short circuits the visual cycle that occurs outside a disc of a rod photoreceptor cell, wherein the drug has the structure of formula VIb.

Group XV, claim(s) 1-50, drawn to a method of treating or preventing an ophtalmological disorder in a subject, the method comprising: administering to the subject a drug that inhibits. Antagonizes, or short circuits the visual cycle that occurs outside a disc of a rod photoreceptor cell, wherein the drug has the structure of formula VIc.

Group XV, claim(s) 1-50, drawn to a method of treating or preventing an ophtalmological disorder in a subject, the method comprising: administering to the subject a drug that inhibits. Antagonizes, or short circuits the visual cycle that occurs outside a disc of a rod photoreceptor cell, wherein the drug has the structure of formula VId.

Group XV, claim(s) 1-50, drawn to a method of treating or preventing an ophtalmological disorder in a subject, the method comprising: administering to the subject a drug that inhibits. Antagonizes, or short circuits the visual cycle that occurs outside a disc of a rod photoreceptor cell, wherein the drug has the structure of formula VIe.

Group XVI, claim(s) 1-50, drawn to a method of treating or preventing an ophtalmological disorder in a subject, the method comprising: administering to the subject a drug that inhibits. Antagonizes, or short circuits the visual cycle that occurs outside a disc of a rod photoreceptor cell, wherein the drug has the structure of formula VIIa.

Group XVII, claim(s) 1-50, drawn to a method of treating or preventing an ophtalmological disorder in a subject, the method comprising: administering to the subject a drug that inhibits. Antagonizes, or short circuits the visual cycle that occurs outside a disc of a rod photoreceptor cell, wherein the drug has the structure of formula VIIb.

Group XVIII, claim(s) 1-50, drawn to a method of treating or preventing an ophtalmological disorder in a subject, the method comprising: administering to the subject a drug that inhibits. Antagonizes, or short circuits the visual cycle that occurs outside a disc of a rod photoreceptor cell, wherein the drug has the structure of formula VIIc.

Group XIX, claim(s) 1-50, drawn to a method of treating or preventing an ophtalmological disorder in a subject, the method comprising: administering to the subject a drug that inhibits. Antagonizes, or short circuits the visual cycle that occurs outside a disc of a rod photoreceptor cell, wherein the drug has the structure of formula VIId.

Group XX, claim(s) 1-50, drawn to a method of treating or preventing an ophtalmological disorder in a subject, the method comprising: administering to the subject a drug that inhibits. Antagonizes, or short circuits the visual cycle that occurs outside a disc of a rod photoreceptor cell, wherein the drug has the structure of formula VIIe.

Group XXI, claim(s) 1-50, drawn to a method of treating or preventing an ophtalmological disorder in a subject, the method comprising: administering to the subject a drug that inhibits. Antagonizes, or short circuits the visual cycle that

occurs outside a disc of a rod photoreceptor cell, wherein the drug has the structure of formula VIIf.

Group XXIII, claim(s) 1-50, drawn to a method of treating or preventing an ophtalmological disorder in a subject, the method comprising: administering to the subject a drug that inhibits. Antagonizes, or short circuits the visual cycle that occurs outside a disc of a rod photoreceptor cell, wherein the drug has the structure of formula VIII.

Group XXIV, claim(s) 1-50, drawn to a method of treating or preventing an ophtalmological disorder in a subject, the method comprising: administering to the subject a drug that inhibits. Antagonizes, or short circuits the visual cycle that occurs outside a disc of a rod photoreceptor cell, wherein the drug has the structure of formula IX.

Group XXV, claim(s) 1-50, drawn to a method of treating or preventing an ophtalmological disorder in a subject, the method comprising: administering to the subject a drug that inhibits. Antagonizes, or short circuits the visual cycle that occurs outside a disc of a rod photoreceptor cell, wherein the drug has the structure of formula X.

Group XXVI, claim(s) 51-79, and 257 drawn to a compound or a formulation of formula Ia or Ie.

Group XXVII, claim(s) 51-79, and 257 drawn to a compound or a formulation of formula Ib or If.

Group XXVIII, claim(s) 51-79, and 257 drawn to a compound or a formulation of formula Ic or Ig.

Group XXIX, claim(s) 51-79, and 257 drawn to a compound or a formulation of formula Id or Ih.

Group XXX, claim(s) 80-110, and 257 drawn to a compound or a formulation of formula IIa or IIe.

Group XXXI, claim(s) 80-110, and 257 drawn to a compound or a formulation of formula IIb or IIf.

Group XXXII, claim(s) 80-110, and 257 drawn to a compound or a formulation of formula IIc or IIg.

Group XXXIII, claim(s) 80-110, and 257drawn to a compound or a formulation of formula IId or IIh.

Group XXXIV, claim(s) 111-135, and 257 drawn to a compound or a formulation of formula IIIa or IIIe.

Group XXXV, claim(s) 111-135, and 257 drawn to a compound or a formulation of formula IIIb or IIIf.

Group XXXVI, claim(s) 111-135, and 257 drawn to a compound or a formulation of formula IIIc or IIIg.

Group XXXVII, claim(s) 111-135, and 257 drawn to a compound or a formulation of formula IIId or IIIh.

Group XXXVIII, claim(s) 136-158, and 257 drawn to a compound or a formulation of formula IV.

Group XXXIX, claim(s) 159-194, and 257 drawn to a compound or a formulation of formula V.

Group XL, claim(s) 195-202, and 257 drawn to a compound or a formulation of formula VIa.

Group XLI, claim(s) 195-202, and 257 drawn to a compound or a formulation of formula VIb.

Group XLII, claim(s) 203-214, and 257 drawn to a compound or a formulation of formula VIc.

Group XLIII, claim(s) 203-214, and 257 drawn to a compound or a formulation of formula VId.

Group XLIV, claim(s) 203-214, and 257 drawn to a compound or a formulation of formula VIe.

Group XLV, claim(s) 215-217, and 257 drawn to a compound or a formulation of formula VIIa.

Group XLVI, claim(s) 218, 235, and 257 drawn to a compound or a formulation of formula VIIb.

Group XLVII, claim(s) 219-222, 236, 238-239 and 257 drawn to a compound or a formulation of formula VIIc.

Group XLVIII, claim(s) 223-226, 242-243 and 257 drawn to a compound or a formulation of formula VIId.

Group XLIX, claim(s) 227-230, and 257 drawn to a compound or a formulation of formula VIIe.

Group L, claim(s) 231-233, 237, 240-241 and 257 drawn to a compound or a formulation of formula VIIf.

Group LI, claim(s) 244, and 257 drawn to a compound or a formulation of formula VIII.

Group LII, claim(s) 255, and 257 drawn to a compound or a formulation of formula IX.

Group LIII, claim(s) 256, and 257 drawn to a compound or a formulation of formula X.

Group LIV, claim(s) 258-264, drawn to a method of identifying a drug for treating or preventing an ophthalmologic disorder, comprising : administering a candidate drug to subject having, or at risk of developing, the ophthalmologic

disorder; and measuring accumulation of retinotoxic compound in retinal pigment epithelium of the subject

The inventions listed as Groups I through LIV do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: for example the technical feature of Group LI relates to a compound of formula VIII, the technical feature of Group LII relates to a compound of formula IX, etc These inventions, as there is no technical relationship involving the same or a common technical feature, cannot be recognized as being linked with each other so as to form a single general inventive concept.

Elections

Elections for Groups I through LIII

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows: compounds of formula I through X. After electing an invention, Applicant is required to elect a single disclosed species corresponding to that particular invention. For example, if Applicant elects Group XXI or Group L, Applicant has to elect a species corresponding to general structure VIIf. Specifically, applicant is required to define each of R and R' groups with a particular species (a species definition like methyl, not a genus definition like alkyl). Electing a compound that is not specifically disclosed as filed may be considered new matter.

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a)..

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: they are structurally different compounds, which depending on the substituents

could belong to different classes and sub-classes and require different search queries.

Rejoinder Notice

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during

prosecution to require the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder**. Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARCOS SZNAIDMAN whose telephone number is (571)270-3498. The examiner can normally be reached on Monday through Thursday 8 AM to 6 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frederick F. Krass can be reached on 571 272-0580. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MARCOS SZNAIDMAN/
Examiner, Art Unit 1612
January 11, 2008

/Brandon J Fetterolf/
Primary Examiner, Art Unit 1642